

DEFENDER POINT-OF-USE SERIES

1.5 nm FILTRATION

mott
MISSION CRITICAL PRECISION

FXP331FF11 - STAINLESS STEEL FIBER MEDIA

DESCRIPTION

The FXP is an Ultra High Purity (UHP) gas filter that incorporates Mott's exclusive all fiber metal media. Made for non-corrosive gases, the FXP meets the demands of UHP gas delivery applications with a high filtration efficiency of particles down to 0.0015 μm .

APPLICATIONS

UHP gas sticks for Semiconductor, LED, Photovoltaic, and MEMS Equipment Hookup. UHP filtration in valve manifold boxes, gas cabinets, tool isolation gas boxes, on-board gas delivery boxes or any process requiring ultra high purity particle removal.



OPERATING CONDITIONS

- » Maximum Operating Pressure: 3000 psig (206.8 barg)
- » Maximum Operating Temperature for Inert Gas: 460°C
- » Maximum Differential Pressure: 1000 psid (68.9 bar)

MATERIALS

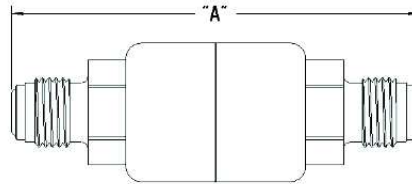
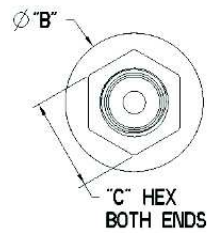
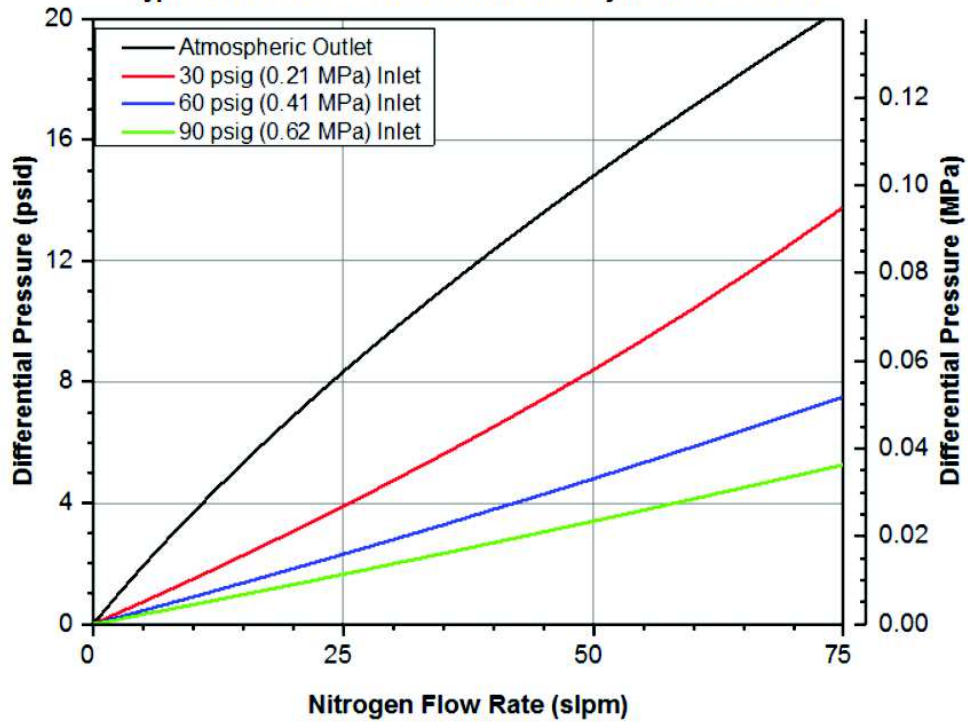
- » Hardware: 316L SS
- » Filter Medium: 316L SS
- » Wetted Hardware Surface Finish: 10 Ra, Electro-polished

SPECIFICATIONS

Particle Removal Size:	$\geq 0.0015 \mu\text{m}$
Filter Efficiency (Log Reduction Value):	≥ 9 LRV (99.9999999% reduction in particles). Confirmed at the most penetrating particle size of 0.08 μm per SEMI F38-0699 test method
Helium Leak Rating:	1×10^{-9} atm cc/sec
Moisture Contribution:	<10 ppb after 1 hour at low-flow ambient purge per SEMI F27 test method
Total Hydrocarbons:	Below detectable limits per SEMASPEC 90120396B test method
Particle Shedding:	Zero particle contribution above background (<1 particle/ft ³) per SEMI F43-0308 test method

FLOW DATA

Mott FXP331 Flow Rate vs. Differential Pressure
Typical Flow Curves as a Function of System Pressures



ORDERING INFORMATION

Part Description	Part Number	Fitting Type	A Inches/mm	B Inches/mm	C Inches/mm
FXP331FF11	6900111	1/4 inch Male/Male Face Seal	3.31/84.0	1.125/28.6	0.75/19.1

*Custom designs and fittings available. Contact a Mott representative for more information.